

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Holtzman, Douglas A. et al.
Application No.: TBA Group No.: TBA
Filed: Herewith Examiner: TBA
For: NOVEL ITALY, LOR-2, STRIFE, TRASH, BDSF, LRSG, AND STMST
PROTEIN AND NUCLEIC ACID MOLECULES AND USES THEREFOR

Mail Stop Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

ASSOCIATE POWER OF ATTORNEY

Dear Sir:

The undersigned attorney has the power of attorney in the subject application. She hereby grants an associate power to:

Mario Cloutier
Millennium Pharmaceuticals, Inc.
40 Landsdowne Street
Cambridge, MA 02139

CERTIFICATION UNDER 37 C.F.R. SECTIONS 1.8(a) and 1.10*

I hereby certify that, on the date shown below, this correspondence is being:

MAILING

- ☒ deposited with the United States Postal Service in an envelope addressed to Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.
37 C.F.R. SECTION 1.8(a) 37 C.F.R. SECTION 1.10*

- ☐ with sufficient postage as first class mail. ☒ as "Express Mail Post Office to Addressee"
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TRANSMISSION

- ☐ transmitted by facsimile to the Patent and Trademark Office.

Signature

Sean Hunziker

(type or print name of person certifying)

Date: March 22, 2004

**WARNING: Each paper or fee filed by "Express Mail" must have the number of the "Express Mail" mailing label placed thereon prior to mailing. 37 C.F.R. section 1.10(b). "Since the filing of correspondence under section 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will not be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442.*

As demonstrated by Appendix A (submitted herewith), Mario Cloutier has passed the Patent Bar Examination and has been granted limited recognition under 37 C.F.R. §10.9(b). Please continue to forward all written and telephonic communications to Jean M. Silveri at the address and telephone number listed below.

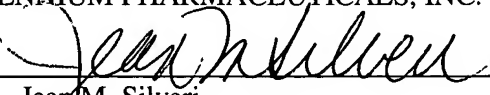
Entry of the remarks made herein is respectfully requested.

March 22, 2004

Respectfully submitted,

MILLENNIUM PHARMACEUTICALS, INC.

By


Jean M. Silveri

Registration No. 39,030

40 Landsdowne Street

Cambridge, MA 02139

Telephone - 617-679-7336

Facsimile - 617-551-8820

**BEFORE THE OFFICE OF ENROLLMENT AND DISCIPLINE
UNITED STATE PATENT AND TRADEMARK OFFICE**

LIMITED RECOGNITION UNDER 37 CFR § 10.9(b)

Mario Cloutier is hereby given limited recognition under 37 CFR, 10.9(b) as an employee of Millenium Pharmaceuticals to prepare and prosecute patent applications wherein Millenium Pharmaceuticals is the assignee of record of the entire interest in the invention claimed in the application. This limited recognition shall expire on the date appearing below, or when whichever of the following events first occurs prior to the date appearing below: (i) Mario Cloutier ceases to lawfully reside in the United States, (ii) Mario Cloutier's employment with Millenium Pharmaceuticals ceases or is terminated, or (iii) Mario Cloutier ceases to remain or reside in the United States on an H-1 visa.

This document constitutes proof of such recognition. The original of this document is on file in the Office of Enrollment and Discipline of the U.S. Patent and Trademark Office.

Expires: March 1, 2005

A handwritten signature in dark ink, appearing to read "Harry I. Moatz", is written over a horizontal line.

**Harry I. Moatz
Director of Enrollment and Discipline**

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CONTINUATION, OR C-I-P)**

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This declaration is for a continuation-in-part (C-I-P) application.

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1. 60/117,580	27 Jan 1999			X

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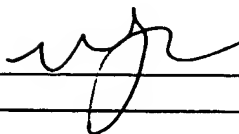
Country of Citizenship United States of America

■■■■■■

Wei Gu

Inventor's signature

X



Date

X

6/15/2001

Residence

Brookline, MA

Post Office Address

48 Kilsyth Road, #2, Brookline, MA 02445

Country of Citizenship

Peoples' Republic of China

COMBINED DECLARATION AND POWER OF ATTORNEY

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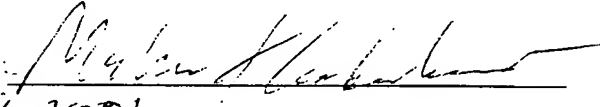
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Date Jan 19, 2001

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Yang Pan

Inventor's signature *Yang Pan* _____

Date *6/19/01* _____

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I hereby claim the benefit, under Title 35, United States Code, Section 120, of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose information that occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application.

PRIOR U.S. APPLICATIONS OR PCT INTERNATIONAL APPLICATIONS DESIGNATING THE U.S. FOR BENEFIT UNDER 35 U.S.C. SECTION 120:				
U.S. APPLICATIONS			Status	
U.S. APPLICATIONS	U.S. FILING DATE	Patented	Pending	Abandoned
1. 09/448,076	23 Nov 1999		X	
2. 09/276,400	25 Mar 1999		X	
3. 09/014,195	27 Jan 1998		X	
4. 09/014,348	27 Jan 1998		X	
5. 09/086,892	29 May 1998		X	
6. 09/296,208	21 April 1999		X	
7. 09/063,950	21 April 1998		X	

PRIOR U.S. APPLICATIONS OR PCT INTERNATIONAL APPLICATIONS DESIGNATING THE U.S. FOR BENEFIT UNDER 35 U.S.C. SECTION 120: (cont'd)				
U.S. APPLICATIONS			Status	
8. 09/561,381	28 April 2000		X	
9. 09/561,810	28 April 2000		X	
10. 09/087,121	29 May 1998		X	
11. 09/672,721	28 Sept 2000		X	
12. 09/049,799	27 Mar 1998		X	
PCT APPLICATION DESIGNATING THE U.S.				
PCT APPLICATION NO.	PCT FILING DATE	U.S. APPLICATION NOS. ASSIGNED (IF ANY)		
PCT/US00/02125	27 Jan 2000		X	

POWER OF ATTORNEY

I hereby appoint the following practitioner(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

APPOINTED PRACTITIONER(S)	REGISTRATION NUMBER(S)
Scott A. Brown	32,724
Susan M. Perkins	36,405
Jean M. Silveri	39,030
George C. Jen	39,239
Theodore Allen	41,578
Jill E. Uhl	43,213
Kerri Pollard Schray	47,066

SEND CORRESPONDENCE TO

Jean M. Silveri
Millennium Pharmaceuticals, Inc.
75 Sidney Street
Cambridge, MA 02139

DIRECT TELEPHONE CALLS TO:

Jean M. Silveri
617-679-7336

DIRECT FACSIMILE CORRESPONDENCE TO:

Jean M. Silveri
617-374-0074 or 617-551-8820

DECLARATION

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

SIGNATURE(S)

Douglas A. Holtzman

Inventor's signature _____

Date _____

Residence Jamaica Plain, MA

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Samantha J. Busfield

Inventor's signature Samantha J. Busfield

Date 19/10/2007

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COMBINED DECLARATION AND POWER OF ATTORNEY

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This declaration is for a continuation-in-part (C-I-P) application.

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My residence, post office address and citizenship are as stated below, next to my name. I believe that I am an original, first and joint inventor of the subject matter that is claimed, and for which a patent is sought on the invention entitled:

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Sean A. McCarthy

Inventor's signature Sean A. McCarthy

Date 2/17/05

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Inventor's signature _____

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Date _____

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Wei Gu

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This declaration is for a continuation-in-part (C-I-P) application.

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U.S. PROVISIONAL APPLICATIONS			Status	
U.S. APPLICATIONS	U.S. FILING DATE	Patented	Pending	Abandoned
1. 60/117,580	27 Jan 1999			X

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PCT APPLICATION DESIGNATING THE U.S.				
PCT APPLICATION NO.	PCT FILING DATE	U.S. APPLICATION NOS. ASSIGNED (IF ANY)		
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SIGNATURE(S)

Douglas A. Holtzman

Inventor's signature

Date *x* 6/19/01

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3. 09/014,195	27 Jan 1998		X	
4. 09/014,348	27 Jan 1998		X	
5. 09/086,892	29 May 1998		X	
6. 09/296,208	21 April 1999		X	
7. 09/063,950	21 April 1998		X	

**PRIOR U.S. APPLICATIONS OR PCT INTERNATIONAL APPLICATIONS
DESIGNATING THE U.S. FOR BENEFIT UNDER 35 U.S.C. SECTION 120: (cont'd)**

U.S. APPLICATIONS			Status	
8. 09/561,381	28 April 2000		X	
9. 09/561,810	28 April 2000		X	
10. 09/087,121	29 May 1998		X	
11. 09/672,721	28 Sept 2000		X	
12. 09/049,799	27 Mar 1998		X	
PCT APPLICATION DESIGNATING THE U.S.				
PCT APPLICATION NO.	PCT FILING DATE	U.S. APPLICATION NOS. ASSIGNED (IF ANY)		
PCT/US00/02125	27 Jan 2000		X	

POWER OF ATTORNEY

I hereby appoint the following practitioner(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

APPOINTED PRACTITIONER(S)	REGISTRATION NUMBER(S)
Scott A. Brown	32,724
Susan M. Perkins	36,405
Jean M. Silveri	39,030
George C. Jen	39,239
Theodore Allen	41,578
Jill E. Uhl	43,213
Kerri Pollard Schray	47,066

SEND CORRESPONDENCE TO

Jean M. Silveri
Millennium Pharmaceuticals, Inc.
75 Sidney Street
Cambridge, MA 02139

DIRECT TELEPHONE CALLS TO:

Jean M. Silveri
617-679-7336

DIRECT FACSIMILE CORRESPONDENCE TO:

Jean M. Silveri
617-374-0074 or 617-551-8820

DECLARATION

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

SIGNATURE(S)

Douglas A. Holtzman

Inventor's signature _____

Date _____

Residence Jamaica Plain, MA

Post Office Address 821 Centre Street, No. 6, Jamaica Plain, MA 02130

Country of Citizenship United States of America

■■■■■■

Sean A. McCarthy

Inventor's signature _____

Date _____

Residence San Diego, CA

Post Office Address 3625 Dupont Street, San Diego, CA 92106

Country of Citizenship United Kingdom

■■■■■■■

Kyle J. MacBeth

Inventor's signature _____

Date _____

Residence Boston, MA

Post Office Address 688 Tremont Sstreet, Apt. 4, Boston, MA 02118

Country of Citizenship United States of America

■■■■■■■

Samantha J. Busfield

Inventor's signature _____

Date _____

Residence Maddington, West Australia

Post Office Address 14 Stanford Street, Maddington, West Australia 6109, Australia

Country of Citizenship Australia

■■■■■■■

Yang Pan

Inventor's signature _____

Date _____

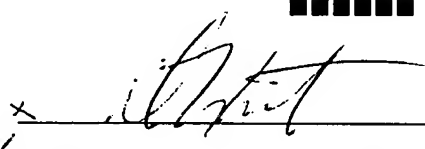
Residence Bellevue, WA

Post Office Address 5308 135th Place SE, Bellevue, WA 98006

Country of Citizenship Peoples' Republic of China

■■■■■■■

David White

Inventor's signature  _____

Date x 6/18/01

Residence Braintree, MA

Post Office Address 35 Hollingsworth Avenue, Braintree, MA 02148

Country of Citizenship United States of America

■■■■■■■

Mehran M. Khodadoust

Inventor's signature _____

Date _____

Residence Brookline, MA 02445

Post Office Address 106 Sewall Avenue, Apt. 6, Brookline, MA 02445

Country of Citizenship United States of America



Wei Gu

Inventor's signature _____

Date _____

Residence Brookline, MA

Post Office Address 48 Kilsyth Road, #2, Brookline, MA 02445

Country of Citizenship Peoples' Republic of China

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of: Douglas A. Holtzman et al

Serial No.: 09/782,980

Filed: February 13, 2001

For: Novel ITALY, LOR-2, STRIFE, TRASH,
BDSF, LRSG, and STMST Protein and Nucleic Acid
Molecules and Uses Therefor

Attorney Docket No.: MPI2000-544OMNI

Group Art Unit:

Examiner:

COPY

Assistant Commissioner for Patents
Washington, D.C. 20231

"Express Mail" mailing label number EL 848 028 747 US

Date of Deposit July 13, 2001

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, DC 20231


Signature

Larry Taylor

Please Print Name of Person Signing

**REVOCATION OF PRIOR POWERS OF ATTORNEY
AND APPOINTMENT OF NEW POWER OF ATTORNEY**

Dear Sir:

MILLENNIUM PHARMACEUTICALS, INC., the Assignee of the entire right, title and interest in the above-identified application by virtue of the Assignment document filed with the United States Patent and Trademark Office herewith hereby revokes all Powers of Attorney with respect to that application heretofore granted and appoints the below listed attorneys with full power of substitution and revocation to prosecute this application and to transact all business in the Patent Office connected therewith.

Scott A. Brown, Reg. No. 32,724; Susan M. Perkins, Reg. No. 36,405; Jean M. Silveri, Reg. No. 39,030; George Jen, Reg. No. 39,239; Theodore Allen, Reg. No. 41,578; Jill Uhl, Reg. No. 43,213; and Kerri Pollard Schray, Reg. No. 47,066

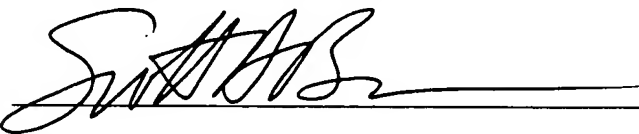
all of Millennium Pharmaceuticals, Inc., 75 Sidney Street, Cambridge, Massachusetts
02139, United States of America.

Please direct all future correspondence to:

Intellectual Property Group
MILLENNIUM PHARMACEUTICALS, INC.
75 Sidney Street
Cambridge, MA 02139

and direct all telephone calls to Jean M. Silveri at (617) 679-7336.

MILLENNIUM PHARMACEUTICALS, INC.

By: 

Typed Name: Scott A. Brown

Title: Associate General Counsel and Chief Patent Counsel

Dated: 6/27/01



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

SEPTEMBER 22, 2001

PTAS

MILLENIUM PHARMACEUTICALS, INC.
JEAN M. SILVERI
INTELLECTUAL PROPERTY GROUP
75 SIDNEY STREET
CAMBRIDGE, MA 02139



101784261A

COPY

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 07/16/2001

REEL/FRAME: 011982/0543
NUMBER OF PAGES: 81

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

HOLTZMAN, DOUGLAS A.

DOC DATE: 06/19/2001

ASSIGNOR:

MCCARTHY, SEAN A.

DOC DATE: 07/02/2001

ASSIGNOR:

MACBETH, KYLE J.

DOC DATE: 06/18/2001

ASSIGNOR:

BUSFIELD, SAMANTHA J.

DOC DATE: 06/19/2001

ASSIGNOR:

PAN, YANG

DOC DATE: 06/19/2001

ASSIGNOR:

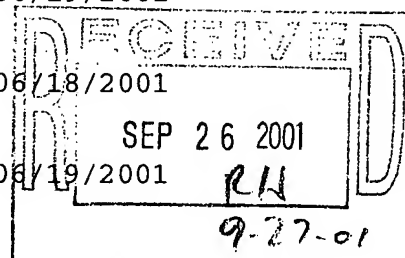
WHITE, DAVID

DOC DATE: 06/18/2001

ASSIGNOR:

KHODADOUST, MEHRAN M.

DOC DATE: 06/19/2001



011982/0543 PAGE 2

ASSIGNOR:
GU, WEI

DOC DATE: 06/15/2001

ASSIGNEE:
MILLENNIUM PHARMACEUTICALS, INC.
75 SIDNEY STREET
CAMBRIDGE, MASSACHUSETTS 02139

SERIAL NUMBER: 09782980
PATENT NUMBER:

FILING DATE: 02/13/2001
ISSUE DATE:

SHARON LATIMER, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

FORM PTO-1595

(Rev. 8-93)

OMB No. 0651-0011 (exp. 4/94)

RECORD

F

07-20-2001

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

Tab settings ⇨⇨⇨▽

▽



MNI-121CP

To the Honorable Commissioner of Patents and 1

Documents or copy thereof.

1. Name of conveying party(ies):

1. Douglas A. Holtzman
2. Sean A. McCarthy
3. Kyle J. MacBeth
4. Samantha J. Busfield
5. Yang Pan
6. David White
7. Mehran M. Khodadoust
8. Wei Gu

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance

- ☒ Assignment ☐ Merger
- ☐ Security Agreement ☐ Change of Name
- ☐ Other _____

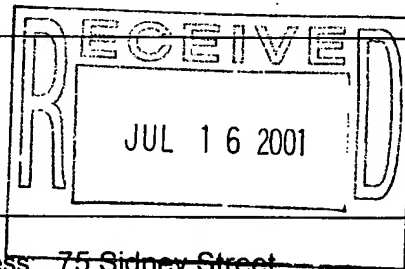
Execution Date(s): 1. June 19, 2001; 2. July 2, 2001;
 3. June 18, 2001; 4. June 19, 2001; 5. June 19, 2001;
 6. June 18, 2001; 7. June 19, 2001; 8. June 15, 2001.

101784261

2. Name and address or receiving party(ies)

Name: Millennium Pharmaceuticals, Inc.

Internal Address: _____

Street Address: 75 Sidney StreetCity: Cambridge State: MassachusettsZIP: 02139Additional name(s) & address(es) attached? ☐ Yes ☒ No

MUP 7/16/01

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: _____

A. Patent Application No.(s)
09/782,980

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☐ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Jean M. Silveri

Internal Address: Intellectual Property Group
Millennium Pharmaceuticals, Inc.

Street Address: 75 Sidney StreetCity: Cambridge State: MA ZIP: 02139

6. Total number of applications and patents involved:

1

7. Total fee (37 CFR 3.41).....\$ \$40.00☒ Enclosed☐ Authorized to be charged to deposit account

8. Deposit account number:

12-0080

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Debra J. Milasincic, Esq.

Name of Person Signing

Signature

July 13, 2001

Date

Total number of pages including cover sheet, attachments, and document:

81

Mail documents to be recorded with required cover sheet information to:
 Commissioner of Patents and Trademarks, Box Assignments
 Washington, D.C. 20231

07/19/2001 DBYRME 00000269 09782980

01 FC:581

40.00 09

Practitioner's Docket No. MPI2000-544OMNI

PATENT

For: U.S. Rights
For: U.S. Application
By: Inventors

ASSIGNMENT OF INVENTION

In consideration of the payment by ASSIGNEE to ASSIGNORS of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,

ASSIGNORS:

Douglas A. Holtzman
821 Centre Street, No. 6
Jamaica Plain, MA 02130
Nationality: United States of America

Yang Pan
5308 135th Place SE
Bellevue, WA 98006
Nationality: Peoples' Republic of China

Sean A. McCarthy
3625 Dupont Street
San Diego, CA 92106
Nationality: United Kingdom

David White
35 Hollingsworth Avenue
Braintree, MA 02148
Nationality: United States of America

Kyle J. MacBeth
688 Tremont Street, Apt. 4
Boston, MA 02118
Nationality: United States of America

Mehran M. Khodadoust
106 Sewall Avenue, Apt. 6
Brookline, MA 02445
Nationality: United States of America

Samantha J. Busfield
14 Stanford Street
Maddington, West Australia 6109
Australia
Nationality: Australia

Wei Gu
48 Kilsyth Road, #2
Brookline, MA 02445
Nationality: Peoples' Republic of China

hereby sell, assign and transfer to

ASSIGNEE:

MILLENNIUM PHARMACEUTICALS, INC.
75 Sidney Street
Cambridge, MA 02139
State of Incorporation: Delaware

and the successors, assigns and legal representatives of the ASSIGNEE the entire right, title and interest for the United States and its territorial possessions and all foreign countries in and to inventions described in the patent application entitled:

NOVEL ITALY, LOR-2, STRIFE, TRASH, BDSF, LRSG, AND STMST PROTEIN AND NUCLEIC ACID MOLECULES AND USES THEREFOR

and which is found in (37 C.F.R. section 3.21) U.S. application no. 09/782,980 filed on January 13, 2001 and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, renewal, or substitute thereof, and as to letters patent any reissue or re-examination thereof; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein.

ASSIGNORS hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

ASSIGNORS further covenant for ourselves and our executors and administrators that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNORS, their executors and administrators and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof and to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements.

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day of

Date: _____

Signature of Kyle J. MacBeth

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of Massachusetts
County of Middlesex

Before me this _____ day of _____ 2001, personally appeared the above named **Kyle J. MacBeth**, to me known to be the person described in, and who executed the foregoing assignment instrument and acknowledged to me that he executed the same of his own free will for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this
19th day of JUNE, 2001.

Date: x 6/19/01

x Douglas A. Holtzman
Signature of Douglas A. Holtzman

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of Massachusetts
County of Middlesex

Before me this 19th day of June 2001, personally appeared the above named **Douglas A. Holtzman**, to me known to be the person described in, and who executed the foregoing assignment instrument and acknowledged to me that he executed the same of his own free will for the purpose therein expressed.

Simonne Corriveau
Signature of Notary Public
Simonne Corriveau
Print Name
My Commission expires: 9/1/2004

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Sean A. McCarthy

Witness

Address

Witness

Address

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Wei Gu

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of _____
County of _____

Before me this _____ day of _____ 2001, personally appeared the above
named **Wei Gu**, to me known to be the person described in, and who executed the foregoing
assignment instrument and acknowledged to me that she executed the same of her own free will
for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Yang Pan

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of _____
County of _____

Before me this _____ day of _____ 2001, personally appeared the above
named **Yang Pan**, to me known to be the persons described in, and who executed the foregoing
assignment instrument and acknowledged to me that he executed the same of his own free will
for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Samantha J. Busfield

Witness

Address

Witness

Address

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Mehran M. Khodadoust

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of _____
County of _____

Before me this _____ day of _____ 2001, personally appeared the above
named **Mehran M. Khodadoust**, to me known to be the persons described in, and who executed
the foregoing assignment instrument and acknowledged to me that he executed the same of his
own free will for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of David White

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of _____
County of _____

Before me this _____ day of _____ 2001, personally appeared the above
named **David White**, to me known to be the persons described in, and who executed the
foregoing assignment instrument and acknowledged to me that he executed the same of his own
free will for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

For: U.S. Rights
For: U.S. Application
By: Inventors

ASSIGNMENT OF INVENTION

In consideration of the payment by ASSIGNEE to ASSIGNORS of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,

ASSIGNORS:

Douglas A. Holtzman
821 Centre Street, No. 6
Jamaica Plain, MA 02130
Nationality: United States of America

Yang Pan
5308 135th Place SE
Bellevue, WA 98006
Nationality: Peoples' Republic of China

Sean A. McCarthy
3625 Dupont Street
San Diego, CA 92106
Nationality: United Kingdom

David White
35 Hollingsworth Avenue
Braintree, MA 02148
Nationality: United States of America

Kyle J. MacBeth
688 Tremont Street, Apt. 4
Boston, MA 02118
Nationality: United States of America

Mehran M. Khodadoust
106 Sewall Avenue, Apt. 6
Brookline, MA 02445
Nationality: United States of America

Samantha J. Busfield
14 Stanford Street
Maddington, West Australia 6109
Australia
Nationality: Australia

Wei Gu
48 Kilsyth Road, #2
Brookline, MA 02445
Nationality: Peoples' Republic of China

hereby sell, assign and transfer to

ASSIGNEE:

MILLENNIUM PHARMACEUTICALS, INC.
75 Sidney Street
Cambridge, MA 02139
State of Incorporation: Delaware

and the successors, assigns and legal representatives of the ASSIGNEE the entire right, title and interest for the United States and its territorial possessions and all foreign countries in and to inventions described in the patent application entitled:

NOVEL ITALY, LOR-2, STRIFE, TRASH, BDSF, LRSG, AND STMST PROTEIN AND NUCLEIC ACID MOLECULES AND USES THEREFOR

and which is found in (37 C.F.R. section 3.21) U.S. application no. 09/782,980 filed on January 13, 2001 and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, renewal, or substitute thereof, and as to letters patent any reissue or re-examination thereof; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein.

ASSIGNORS hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

ASSIGNORS further covenant for ourselves and our executors and administrators that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNORS, their executors and administrators and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof and to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements.

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day of

Date: _____

Signature of Kyle J. MacBeth

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of Massachusetts
County of Middlesex

Before me this _____ day of _____ 2001, personally appeared the above named **Kyle J. MacBeth**, to me known to be the person described in, and who executed the foregoing assignment instrument and acknowledged to me that he executed the same of his own free will for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this
_____ day of _____, 2001.

Date: _____

Signature of Douglas A. Holtzman

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of Massachusetts
County of Middlesex

Before me this _____ day of _____ 2001, personally appeared the above
named **Douglas A. Holtzman**, to me known to be the person described in, and who executed the
foregoing assignment instrument and acknowledged to me that he executed the same of his own
free will for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this 2nd day
of July, 2001.

Date: x 7/2/07

x SAH McCarthy
Signature of Sean A. McCarthy

x [Signature]
Witness

x 4605 Campus Ave #3 San Diego CA 92116
Address

x upon adams
Witness

92103
x 4317 Maryland St. San Diego, CA
Address

Before me this _____ day of _____ 2001, personally appeared the above-named
Sean McCarthy to me known to be the person described in, and who executed
the foregoing assignment instrument and acknowledged to me that he executed
the same of his own free will for the purpose therein expressed.

State/Commonwealth of Massachusetts
County of Middlesex

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Wei Gu

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of _____
County of _____

Before me this _____ day of _____ 2001, personally appeared the above
named **Wei Gu**, to me known to be the person described in, and who executed the foregoing
assignment instrument and acknowledged to me that she executed the same of her own free will
for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Yang Pan

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of _____
County of _____

Before me this _____ day of _____ 2001, personally appeared the above
named **Yang Pan**, to me known to be the persons described in, and who executed the foregoing
assignment instrument and acknowledged to me that he executed the same of his own free will
for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Samantha J. Busfield

Witness

Address

Witness

Address

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Mehran M. Khodadoust

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of _____
County of _____

Before me this _____ day of _____ 2001, personally appeared the above
named **Mehran M. Khodadoust**, to me known to be the persons described in, and who executed
the foregoing assignment instrument and acknowledged to me that he executed the same of his
own free will for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of David White

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of _____
County of _____

Before me this _____ day of _____ 2001, personally appeared the above
named **David White**, to me known to be the persons described in, and who executed the
foregoing assignment instrument and acknowledged to me that he executed the same of his own
free will for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

Practitioner's Docket No. MPI2000-544OMNI

PATENT

For: U.S. Rights
For: U.S. Application
By: Inventors

ASSIGNMENT OF INVENTION

In consideration of the payment by ASSIGNEE to ASSIGNORS of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,

ASSIGNORS:

Douglas A. Holtzman
821 Centre Street, No. 6
Jamaica Plain, MA 02130
Nationality: United States of America

Yang Pan
5308 135th Place SE
Bellevue, WA 98006
Nationality: Peoples' Republic of China

Sean A. McCarthy
3625 Dupont Street
San Diego, CA 92106
Nationality: United Kingdom

David White
35 Hollingsworth Avenue
Braintree, MA 02148
Nationality: United States of America

Kyle J. MacBeth
688 Tremont Street, Apt. 4
Boston, MA 02118
Nationality: United States of America

Mehran M. Khodadoust
106 Sewall Avenue, Apt. 6
Brookline, MA 02445
Nationality: United States of America

Samantha J. Busfield
14 Stanford Street
Maddington, West Australia 6109
Australia
Nationality: Australia

Wei Gu
48 Kilsyth Road, #2
Brookline, MA 02445
Nationality: Peoples' Republic of China

hereby sell, assign and transfer to

ASSIGNEE:

MILLENNIUM PHARMACEUTICALS, INC.
75 Sidney Street
Cambridge, MA 02139
State of Incorporation: Delaware

and the successors, assigns and legal representatives of the ASSIGNEE the entire right, title and interest for the United States and its territorial possessions and all foreign countries in and to inventions described in the patent application entitled:

NOVEL ITALY, LOR-2, STRIFE, TRASH, BDSF, LRSG, AND STMST PROTEIN AND NUCLEIC ACID MOLECULES AND USES THEREFOR

and which is found in (37 C.F.R. section 3.21) U.S. application no. 09/782,980 filed on January 13, 2001 and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, renewal, or substitute thereof, and as to letters patent any reissue or re-examination thereof; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein.

ASSIGNORS hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

ASSIGNORS further covenant for ourselves and our executors and administrators that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNORS, their executors and administrators and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof and to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements.

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

IN WITNESS WHEREOF, I have hereunto set hand and seal this 15th day of JUNE.

Date: X 6/18/01

X Kyle J. MacBeth
Signature of Kyle J. MacBeth

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of Massachusetts
County of Middlesex

Before me this 15th day of June 2001, personally appeared the above named **Kyle J. MacBeth**, to me known to be the person described in, and who executed the foregoing assignment instrument and acknowledged to me that he executed the same of his own free will for the purpose therein expressed.

Simonne Corriveau
Signature of Notary Public
SIMONNE CORRIVEAU
Print Name
My Commission expires: 9/1/2006

IN WITNESS WHEREOF, I have hereunto set hand and seal this
_____ day of _____, 2001.

Date: _____

Signature of Douglas A. Holtzman

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of Massachusetts
County of Middlesex

Before me this _____ day of _____ 2001, personally appeared the above
named **Douglas A. Holtzman**, to me known to be the person described in, and who executed the
foregoing assignment instrument and acknowledged to me that he executed the same of his own
free will for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Sean A. McCarthy

Witness

Address

Witness

Address

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Wei Gu

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of _____
County of _____

Before me this _____ day of _____ 2001, personally appeared the above
named **Wei Gu**, to me known to be the person described in, and who executed the foregoing
assignment instrument and acknowledged to me that she executed the same of her own free will
for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Yang Pan

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of _____
County of _____

Before me this _____ day of _____ 2001, personally appeared the above
named **Yang Pan**, to me known to be the persons described in, and who executed the foregoing
assignment instrument and acknowledged to me that he executed the same of his own free will
for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Samantha J. Busfield

Witness

Address

Witness

Address

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Mehran M. Khodadoust

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of _____
County of _____

Before me this _____ day of _____ 2001, personally appeared the above
named **Mehran M. Khodadoust**, to me known to be the persons described in, and who executed
the foregoing assignment instrument and acknowledged to me that he executed the same of his
own free will for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of David White

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of _____

County of _____

Before me this _____ day of _____ 2001, personally appeared the above
named **David White**, to me known to be the persons described in, and who executed the
foregoing assignment instrument and acknowledged to me that he executed the same of his own
free will for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

Practitioner's Docket No. MPI2000-544OMNI

PATENT

For: U.S. Rights
For: U.S. Application
By: Inventors

ASSIGNMENT OF INVENTION

In consideration of the payment by ASSIGNEE to ASSIGNORS of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,

ASSIGNORS:

Douglas A. Holtzman
821 Centre Street, No. 6
Jamaica Plain, MA 02130
Nationality: United States of America

Yang Pan
5308 135th Place SE
Bellevue, WA 98006
Nationality: Peoples' Republic of China

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Nationality: United Kingdom

David White
35 Hollingsworth Avenue
Braintree, MA 02148
Nationality: United States of America

Kyle J. MacBeth
688 Tremont Street, Apt. 4
Boston, MA 02118
Nationality: United States of America

Mehran M. Khodadoust
106 Sewall Avenue, Apt. 6
Brookline, MA 02445
Nationality: United States of America

Samantha J. Busfield
14 Stanford Street
Maddington, West Australia 6109
Australia
Nationality: Australia

Wei Gu
48 Kilsyth Road, #2
Brookline, MA 02445
Nationality: Peoples' Republic of China

hereby sell, assign and transfer to

ASSIGNEE:

MILLENNIUM PHARMACEUTICALS, INC.
75 Sidney Street
Cambridge, MA 02139
State of Incorporation: Delaware

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NOVEL ITALY, LOR-2, STRIFE, TRASH, BDSF, LRSG, AND STMST PROTEIN AND NUCLEIC ACID MOLECULES AND USES THEREFOR

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AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day of _____.

Date: _____

Signature of Kyle J. MacBeth

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of Massachusetts
County of Middlesex

Before me this _____ day of _____ 2001, personally appeared the above named **Kyle J. MacBeth**, to me known to be the person described in, and who executed the foregoing assignment instrument and acknowledged to me that he executed the same of his own free will for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this
_____ day of _____, 2001.

Date: _____

Signature of Douglas A. Holtzman

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of Massachusetts
County of Middlesex

Before me this _____ day of _____ 2001, personally appeared the above
named **Douglas A. Holtzman**, to me known to be the person described in, and who executed the
foregoing assignment instrument and acknowledged to me that he executed the same of his own
free will for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Sean A. McCarthy

Witness

Address

Witness

Address

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Wei Gu

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of _____
County of _____

Before me this _____ day of _____ 2001, personally appeared the above
named **Wei Gu**, to me known to be the person described in, and who executed the foregoing
assignment instrument and acknowledged to me that she executed the same of her own free will
for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Yang Pan

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of _____

County of _____

Before me this _____ day of _____ 2001, personally appeared the above
named **Yang Pan**, to me known to be the persons described in, and who executed the foregoing
assignment instrument and acknowledged to me that he executed the same of his own free will
for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Samantha J. Busfield

Witness

Address

Witness

Address

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Mehran M. Khodadoust

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of _____
County of _____

Before me this _____ day of _____ 2001, personally appeared the above
named **Mehran M. Khodadoust**, to me known to be the persons described in, and who executed
the foregoing assignment instrument and acknowledged to me that he executed the same of his
own free will for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this 15th day
of JUNE, 2001.

Date: X 6/18/01

X [Signature]
Signature of David White

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of Massachusetts
County of Middlesex

Before me this 15th day of JUNE 2001, personally appeared the above
named **David White**, to me known to be the persons described in, and who executed the
foregoing assignment instrument and acknowledged to me that he executed the same of his own
free will for the purpose therein expressed.

[Signature]
Signature of Notary Public
SIMONNE CORRIVEAU
Print Name
My Commission expires: 9/1/2006

Practitioner's Docket No. MPI2000-544OMNI

PATENT

For: U.S. Rights
For: U.S. Application
By: Inventors

ASSIGNMENT OF INVENTION

In consideration of the payment by ASSIGNEE to ASSIGNORS of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,

ASSIGNORS:

Douglas A. Holtzman
821 Centre Street, No. 6
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Yang Pan
5308 135th Place SE
Bellevue, WA 98006
Nationality: Peoples' Republic of China

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Nationality: United Kingdom

David White
35 Hollingsworth Avenue
Braintree, MA 02148
Nationality: United States of America

Kyle J. MacBeth
688 Tremont Street, Apt. 4
Boston, MA 02118
Nationality: United States of America

Mehran M. Khodadoust
106 Sewall Avenue, Apt. 6
Brookline, MA 02445
Nationality: United States of America

Samantha J. Busfield
14 Stanford Street
Maddington, West Australia 6109
Australia
Nationality: Australia

Wei Gu
48 Kilsyth Road, #2
Brookline, MA 02445
Nationality: Peoples' Republic of China

hereby sell, assign and transfer to

ASSIGNEE:

MILLENNIUM PHARMACEUTICALS, INC.
75 Sidney Street
Cambridge, MA 02139
State of Incorporation: Delaware

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NOVEL ITALY, LOR-2, STRIFE, TRASH, BDSF, LRSG, AND STMST PROTEIN AND NUCLEIC ACID MOLECULES AND USES THEREFOR

and which is found in (37 C.F.R. section 3.21) U.S. application no. 09/782,980 filed on January 13, 2001 and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, renewal, or substitute thereof, and as to letters patent any reissue or re-examination thereof; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein.

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AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day of _____.

Date: _____

Signature of Kyle J. MacBeth

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of Massachusetts
County of Middlesex

Before me this _____ day of _____ 2001, personally appeared the above named **Kyle J. MacBeth**, to me known to be the person described in, and who executed the foregoing assignment instrument and acknowledged to me that he executed the same of his own free will for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this
_____ day of _____, 2001.

Date: _____

Signature of Douglas A. Holtzman

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of Massachusetts
County of Middlesex

Before me this _____ day of _____ 2001, personally appeared the above
named **Douglas A. Holtzman**, to me known to be the person described in, and who executed the
foregoing assignment instrument and acknowledged to me that he executed the same of his own
free will for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Sean A. McCarthy

Witness

Address

Witness

Address

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Wei Gu

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of _____
County of _____

Before me this _____ day of _____ 2001, personally appeared the above
named **Wei Gu**, to me known to be the person described in, and who executed the foregoing
assignment instrument and acknowledged to me that she executed the same of her own free will
for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Yang Pan

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of _____

County of _____

Before me this _____ day of _____ 2001, personally appeared the above
named **Yang Pan**, to me known to be the persons described in, and who executed the foregoing
assignment instrument and acknowledged to me that he executed the same of his own free will
for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Samantha J. Busfield

Witness

Address

Witness

Address

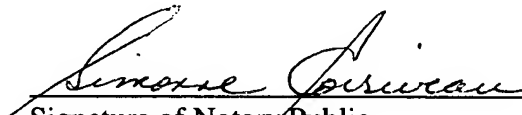
IN WITNESS WHEREOF, I have hereunto set hand and seal this 19th day
of JUNE, 2001.

Date: June 19, 2001 
Signature of Mehran M. Khodadoust

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of Massachusetts
County of Middlesex

Before me this 19th day of JUNE 2001, personally appeared the above
named **Mehran M. Khodadoust**, to me known to be the persons described in, and who executed
the foregoing assignment instrument and acknowledged to me that he executed the same of his
own free will for the purpose therein expressed.


Signature of Notary Public
SIMONNE CORRIVEAU
Print Name
My Commission expires: 9/1/2006

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of David White

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of _____
County of _____

Before me this _____ day of _____ 2001, personally appeared the above
named **David White**, to me known to be the persons described in, and who executed the
foregoing assignment instrument and acknowledged to me that he executed the same of his own
free will for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

Practitioner's Docket No. MPI2000-544OMNI

PATENT

For: U.S. Rights
For: U.S. Application
By: Inventors

ASSIGNMENT OF INVENTION

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ASSIGNORS:

Douglas A. Holtzman
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Nationality: United States of America

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Australia
Nationality: Australia

Wei Gu
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Nationality: Peoples' Republic of China

hereby sell, assign and transfer to

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State of Incorporation: Delaware

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IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day of _____.

Date: _____

Signature of Kyle J. MacBeth

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of Massachusetts
County of Middlesex

Before me this _____ day of _____ 2001, personally appeared the above named **Kyle J. MacBeth**, to me known to be the person described in, and who executed the foregoing assignment instrument and acknowledged to me that he executed the same of his own free will for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this
_____ day of _____, 2001.

Date: _____

Signature of Douglas A. Holtzman

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of Massachusetts
County of Middlesex

Before me this _____ day of _____ 2001, personally appeared the above
named **Douglas A. Holtzman**, to me known to be the person described in, and who executed the
foregoing assignment instrument and acknowledged to me that he executed the same of his own
free will for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Sean A. McCarthy

Witness

Address

Witness

Address

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Wei Gu

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of _____
County of _____

Before me this _____ day of _____ 2001, personally appeared the above
named **Wei Gu**, to me known to be the person described in, and who executed the foregoing
assignment instrument and acknowledged to me that she executed the same of her own free will
for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Yang Pan

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of _____
County of _____

Before me this _____ day of _____ 2001, personally appeared the above
named **Yang Pan**, to me known to be the persons described in, and who executed the foregoing
assignment instrument and acknowledged to me that he executed the same of his own free will
for the purpose therein expressed.

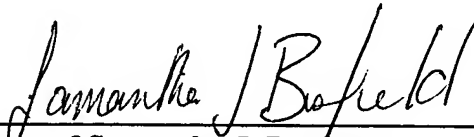
Signature of Notary Public


Print Name

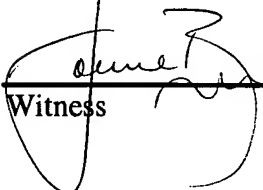
My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this 19th day
of June, 2001.

Date: 19 June 2001

x 
Signature of Samantha J. Busfield

 PR PETA A TILBROOK, 8 MORGAN ST MORMAN PARK WA6012 AUSTRALIA
Witness Address

 PR JOANNE M BRITTO UNIT 6/52 KING GEORGE ST, VIC PARK 6100 AUST
Witness Address

State/Commonwealth of Massachusetts
County of Middlesex

Before me this _____ day of _____ 2001, personally appeared the above-
named Samantha Busfield, to me known to be the persons described in, and who
executed the foregoing assignment instrument and acknowledged to me that
she executed the same of his own free will for the purpose therein expressed.

Signature of Notary Public

Print Name
My Commission expires _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Mehran M. Khodadoust

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of _____
County of _____

Before me this _____ day of _____ 2001, personally appeared the above
named **Mehran M. Khodadoust**, to me known to be the persons described in, and who executed
the foregoing assignment instrument and acknowledged to me that he executed the same of his
own free will for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of David White

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of _____
County of _____

Before me this _____ day of _____ 2001, personally appeared the above
named **David White**, to me known to be the persons described in, and who executed the
foregoing assignment instrument and acknowledged to me that he executed the same of his own
free will for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

Practitioner's Docket No. MPI2000-544OMNI

PATENT

For: U.S. Rights
For: U.S. Application
By: Inventors

ASSIGNMENT OF INVENTION

In consideration of the payment by ASSIGNEE to ASSIGNORS of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,

ASSIGNORS:

Douglas A. Holtzman
821 Centre Street, No. 6
Jamaica Plain, MA 02130
Nationality: United States of America

Yang Pan
5308 135th Place SE
Bellevue, WA 98006
Nationality: Peoples' Republic of China

Sean A. McCarthy
3625 Dupont Street
San Diego, CA 92106
Nationality: United Kingdom

David White
35 Hollingsworth Avenue
Braintree, MA 02148
Nationality: United States of America

Kyle J. MacBeth
688 Tremont Street, Apt. 4
Boston, MA 02118
Nationality: United States of America

Mehran M. Khodadoust
106 Sewall Avenue, Apt. 6
Brookline, MA 02445
Nationality: United States of America

Samantha J. Busfield
14 Stanford Street
Maddington, West Australia 6109
Australia
Nationality: Australia

Wei Gu
48 Kilsyth Road, #2
Brookline, MA 02445
Nationality: Peoples' Republic of China

hereby sell, assign and transfer to

ASSIGNEE:

MILLENNIUM PHARMACEUTICALS, INC.
75 Sidney Street
Cambridge, MA 02139
State of Incorporation: Delaware

and the successors, assigns and legal representatives of the ASSIGNEE the entire right, title and interest for the United States and its territorial possessions and all foreign countries in and to inventions described in the patent application entitled:

NOVEL ITALY, LOR-2, STRIFE, TRASH, BDSF, LRSG, AND STMST PROTEIN AND NUCLEIC ACID MOLECULES AND USES THEREFOR

and which is found in (37 C.F.R. section 3.21) U.S. application no. 09/782,980 filed on January 13, 2001 and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, renewal, or substitute thereof, and as to letters patent any reissue or re-examination thereof; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein.

ASSIGNORS hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

ASSIGNORS further covenant for ourselves and our executors and administrators that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNORS, their executors and administrators and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof and to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements.

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day of

Date: _____

Signature of Kyle J. MacBeth

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of Massachusetts
County of Middlesex

Before me this _____ day of _____ 2001, personally appeared the above named **Kyle J. MacBeth**, to me known to be the person described in, and who executed the foregoing assignment instrument and acknowledged to me that he executed the same of his own free will for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this
_____ day of _____, 2001.

Date: _____

Signature of Douglas A. Holtzman

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of Massachusetts
County of Middlesex

Before me this _____ day of _____ 2001, personally appeared the above
named **Douglas A. Holtzman**, to me known to be the person described in, and who executed the
foregoing assignment instrument and acknowledged to me that he executed the same of his own
free will for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Sean A. McCarthy

Witness

Address

Witness

Address

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Wei Gu

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of _____
County of _____

Before me this _____ day of _____ 2001, personally appeared the above
named **Wei Gu**, to me known to be the person described in, and who executed the foregoing
assignment instrument and acknowledged to me that she executed the same of her own free will
for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this 19TH day
of JUNE, 2001.

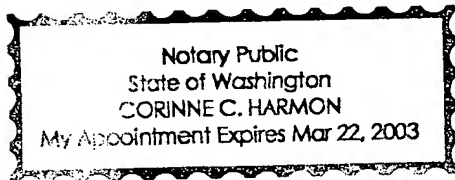
Date: X 6/19/01

X Yang Pan
Signature of Yang Pan

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of WASHINGTON
County of KING

Before me this 19TH day of JUNE 2001, personally appeared the above
named **Yang Pan**, to me known to be the persons described in, and who executed the foregoing
assignment instrument and acknowledged to me that he executed the same of his own free will
for the purpose therein expressed.



Corinne Harmon
Signature of Notary Public
CORINNE HARMON
Print Name
My Commission expires: 03-22-03

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Samantha J. Busfield

Witness

Address

Witness

Address

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Mehran M. Khodadoust

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of _____
County of _____

Before me this _____ day of _____ 2001, personally appeared the above
named **Mehran M. Khodadoust**, to me known to be the persons described in, and who executed
the foregoing assignment instrument and acknowledged to me that he executed the same of his
own free will for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of David White

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of _____

County of _____

Before me this _____ day of _____ 2001, personally appeared the above
named **David White**, to me known to be the persons described in, and who executed the
foregoing assignment instrument and acknowledged to me that he executed the same of his own
free will for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

Practitioner's Docket No. MPI2000-544OMNI

PATENT

For: U.S. Rights
For: U.S. Application
By: Inventors

ASSIGNMENT OF INVENTION

In consideration of the payment by ASSIGNEE to ASSIGNORS of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,

ASSIGNORS:

Douglas A. Holtzman
821 Centre Street, No. 6
Jamaica Plain, MA 02130
Nationality: United States of America

Yang Pan
5308 135th Place SE
Bellevue, WA 98006
Nationality: Peoples' Republic of China

Sean A. McCarthy
3625 Dupont Street
San Diego, CA 92106
Nationality: United Kingdom

David White
35 Hollingsworth Avenue
Braintree, MA 02148
Nationality: United States of America

Kyle J. MacBeth
688 Tremont Street, Apt. 4
Boston, MA 02118
Nationality: United States of America

Mehran M. Khodadoust
106 Sewall Avenue, Apt. 6
Brookline, MA 02445
Nationality: United States of America

Samantha J. Busfield
14 Stanford Street
Maddington, West Australia 6109
Australia
Nationality: Australia

Wei Gu
48 Kilsyth Road, #2
Brookline, MA 02445
Nationality: Peoples' Republic of China

hereby sell, assign and transfer to

ASSIGNEE:

MILLENNIUM PHARMACEUTICALS, INC.
75 Sidney Street
Cambridge, MA 02139
State of Incorporation: Delaware

and the successors, assigns and legal representatives of the ASSIGNEE the entire right, title and interest for the United States and its territorial possessions and all foreign countries in and to inventions described in the patent application entitled:

NOVEL ITALY, LOR-2, STRIFE, TRASH, BDSF, LRSG, AND STMST PROTEIN AND NUCLEIC ACID MOLECULES AND USES THEREFOR

and which is found in (37 C.F.R. section 3.21) U.S. application no. 09/782,980 filed on January 13, 2001 and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, renewal, or substitute thereof, and as to letters patent any reissue or re-examination thereof; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein.

ASSIGNORS hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

ASSIGNORS further covenant for ourselves and our executors and administrators that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNORS, their executors and administrators and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof and to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements.

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day of

_____.

Date: _____

Signature of Kyle J. MacBeth

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of Massachusetts
County of Middlesex

Before me this _____ day of _____ 2001, personally appeared the above named **Kyle J. MacBeth**, to me known to be the person described in, and who executed the foregoing assignment instrument and acknowledged to me that he executed the same of his own free will for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this
_____ day of _____, 2001.

Date: _____

Signature of Douglas A. Holtzman

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of Massachusetts
County of Middlesex

Before me this _____ day of _____ 2001, personally appeared the above
named **Douglas A. Holtzman**, to me known to be the person described in, and who executed the
foregoing assignment instrument and acknowledged to me that he executed the same of his own
free will for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Sean A. McCarthy

Witness


Address

Witness

Address

IN WITNESS WHEREOF, I have hereunto set hand and seal this 15th day
of JUNE, 2001.


Date: JUNE 15, 2001


Signature of Wei Gu

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of Massachusetts
County of Middlesex

Before me this 15th day of June 2001, personally appeared the above
named **Wei Gu**, to me known to be the person described in, and who executed the foregoing
assignment instrument and acknowledged to me that she executed the same of her own free will
for the purpose therein expressed.


Signature of Notary Public
Simonne Colrivon
Print Name
My Commission expires: 9/1/2006

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Yang Pan

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of _____

County of _____

Before me this _____ day of _____ 2001, personally appeared the above
named **Yang Pan**, to me known to be the persons described in, and who executed the foregoing
assignment instrument and acknowledged to me that he executed the same of his own free will
for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Samantha J. Busfield

Witness

Address

Witness

Address

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of Mehran M. Khodadoust

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of _____
County of _____

Before me this _____ day of _____ 2001, personally appeared the above
named **Mehran M. Khodadoust**, to me known to be the persons described in, and who executed
the foregoing assignment instrument and acknowledged to me that he executed the same of his
own free will for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____

IN WITNESS WHEREOF, I have hereunto set hand and seal this _____ day
of _____, 2001.

Date: _____

Signature of David White

NOTARIZATION ACCOMPANYING ASSIGNMENT

State/Commonwealth of _____
County of _____

Before me this _____ day of _____ 2001, personally appeared the above
named **David White**, to me known to be the persons described in, and who executed the
foregoing assignment instrument and acknowledged to me that he executed the same of his own
free will for the purpose therein expressed.

Signature of Notary Public

Print Name

My Commission expires: _____